

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A process for production of a compound oxide, comprising:

contacting an organic phase having dissolved therein an organic compound which produces a hydroxide of a first element when hydrolyzed, with an aqueous phase containing a second element as an ion, ~~to produce~~ in a form of a microemulsion containing a surfactant, in which a product of the hydroxide of the first element ~~is produced by~~ is produced by a hydrolysis reaction of the organic compound at their interface between said organic and aqueous phases while incorporating the second element in the product, and

firing the resulting product to produce a compound oxide of the first element and second element.
2. (Original) A process for production of a compound oxide according to claim 1, wherein said aqueous phase further contains a third or additional elements as ions, said product further contains a third or additional elements, and the obtained compound oxide is a compound oxide of the first, second and third or additional elements.
3. (Original) A process for production of a compound oxide according to claim 1, wherein a water-in-oil type emulsion system or microemulsion system is used.
4. (Original) A process for production of a compound oxide according to claim 3, wherein the size of the aqueous phase of the water-in-oil type microemulsion is in the range of 2-40 nm.
5. (Original) A process for production of a compound oxide according to claim 1, wherein said organic compound is a metal alkoxide or an acetate-metal complex, and the second and/or third or additional element ions are ions of inorganic acid metal salts.

6. (Currently Amended) A process for production of a compound oxide of zirconium and cerium, ~~comprising~~comprising:

preparing a microemulsion comprising an ~~organic~~aqueous phase dispersed in an ~~aqueous~~organic phase, said organic phase having dissolved therein a zirconium alkoxide, said aqueous phase containing a cerium ~~salt~~salt, said aqueous phase being emulsified in said organic phase with a surfactant;

~~conducting~~contacting said organic phase with said aqueous phase to produce a product of zirconium hydroxide by hydrolysis reaction of the zirconium alkoxide at their interface between said organic and aqueous phases while incorporating the ~~zirconium-cerium~~cerium element in the product, and

firing the resulting product to produce a compound ~~oxide of zirconium and cerium~~oxide of the first element and second element.

7. (Previously Presented) A process for production of an exhaust gas purifying catalyst carrier, characterized by producing the exhaust gas purification catalyst carrier by a production process according to claim 1.

8. (Previously Presented) A process for production of an exhaust gas purifying catalyst carrier, characterized by producing the exhaust gas purification catalyst carrier by a production process according to claim 2.

9. (Previously Presented) A process for production of an exhaust gas purifying catalyst carrier, characterized by producing the exhaust gas purification catalyst carrier by a production process according to claim 3.

10. (Previously Presented) A process for production of an exhaust gas purifying catalyst carrier, characterized by producing the exhaust gas purification catalyst carrier by a production process according to claim 4.

11. (Previously Presented) A process for production of an exhaust gas purifying catalyst carrier, characterized by producing the exhaust gas purification catalyst carrier by a production process according to claim 5.

12. (Previously Presented) A process for production of an exhaust gas purifying catalyst carrier, characterized by producing the exhaust gas purification catalyst carrier by a production process according to claim 6.